

"Always Ready" Wrenches.



This Wrench will hold and turn Square and Round Iron, or Pipe; and is "Always Ready" without adjusting.

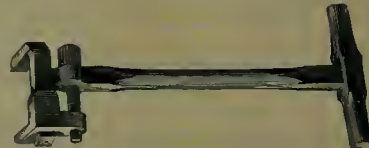
Nickel-Plated, Prepared Forged Steel, Oil Tempered.

No. 1.	Holds from $\frac{1}{4}$ to $\frac{3}{4}$ Inch Square or Round Iron	Per Dozen, \$ 5 00
No. 2.	" " $\frac{1}{4}$ " $1\frac{1}{4}$ " " " " "	" " 6 75
No. 2½.	" " $\frac{1}{4}$ " $1\frac{3}{4}$ " " " " "	" " 10 50
No. 3.	" " $\frac{3}{4}$ " 2 " " " " "	" " 16 00

Basin Wrenches.



NEW PATTERN.

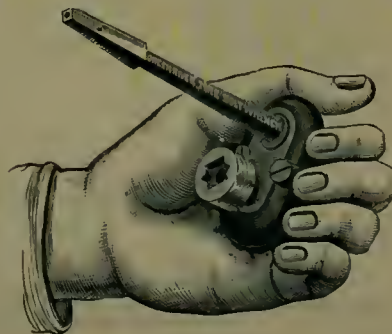


OLD PATTERN.

10 Inch Long Each, \$1 25 | 8 Inch Long Each, \$1 00

"Green River" Patent Rim Wrench.

FOR NUTS ON TIRE-BOLTS INSIDE THE FELLOE.



This is a labor saving tool for taking off and putting on nuts in an awkward place inside carriage felloes, and it will be found to make rapid work of what is usually a tedious job with an S wrench.

No workman with any regard for his time will fail to use this tool, which will soon earn its moderate cost in any shop, small or large.

It is made light, handy and strong, and is adapted for use on nuts $\frac{1}{8}$, $\frac{3}{16}$ and $\frac{1}{4}$ inch.

Price Each, \$1 50

Cross Rim Wrench.



For Nuts $\frac{3}{16}$, $\frac{1}{4}$, $\frac{5}{16}$ and $\frac{3}{8}$ Inch.

This Tool will be found to be very handy for nuts inside of felloes of carriage wheels, as well as for other purposes.

Price Each, \$0 25

Adjustable Lightning Tap and Reamer Wrench.



Size A, Length 10 $\frac{1}{2}$ Inches, for Taps $\frac{3}{16}$ Inch to $\frac{1}{2}$ Inch.

Price, \$3 00

Size B, Length 15 Inches, for Taps $\frac{1}{4}$ Inch to $\frac{3}{4}$ Inch.

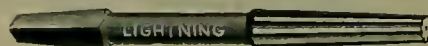
Price, \$3 50

Size C, Length 20 Inches, for Taps $\frac{3}{8}$ Inch to 1 Inch.

Price, \$5 00

Lightning Taper Reamer.

With Shanks $\frac{1}{2}$ Inch in Diameter.



Inch,	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{11}{16}$	$\frac{3}{4}$
Price, \$0	55	0 60	0 65	0 70	0 75	0 80	1 00	1 20	1 40

New Centre Reamer.



This Tool will be appreciated by every machinist. It is accurately made of the best steel, and of the most approved form.

Price, \$0 50

Lightning Countersink and Twist Drill Combined.



Hole clear through, exact size of Drill, and Drill may be set according to depth wanted. The Countersink following the Drill, the job is finished at one operation, saving the adjusting of tools and work twice.

Sizes, Inch,	$\frac{5}{32}$	$\frac{7}{32}$	$\frac{9}{32}$	$\frac{11}{32}$
Price, \$1	50	1 60	1 70	1 80

With Round Shanks, $\frac{41}{64}$ Inch Diameter.

"Green River" Tire Bolt Holder.



For Clamping Bolts while the Nuts are being turned off. Applied without a Screw.

Price

Each, \$1 00

"Lightning" Punching Press.



The handle may be set at any angle, up or down, to suit various kinds of work.

This machine is carefully made throughout, of the best material, and is highly approved by our customers.

Will Punch $\frac{1}{4}$ Inch Round Hole in Iron $\frac{1}{4}$ Inch Thick, or $\frac{5}{16}$ Inch Hole in Iron $\frac{3}{16}$ Inch Thick.

Supplied with 3 Punches and Dies, $\frac{1}{8}$, $\frac{3}{16}$ and $\frac{1}{4}$ Inch. Unless otherwise ordered, Punches and Dies will be supplied $\frac{1}{32}$ Inch over exact sizes.

Price

Each, \$25 00

Extra Punches or Dies. Each, \$0 50

WILEY & RUSSELL M'F'G CO.'S

"Green River" Screw Plate.

LIKE THE "LIGHTNING" PLATE, IT DOES ITS WORK AT A SINGLE CUT.

THE NEW "GREEN RIVER" SCREW PLATE.

We offer the New Plate as an important addition to our line. Its quality, both as to material and workmanship, is up to the highest standard; and its simplicity, solidity, and durability, with its moderate price, make it particularly attractive.

Like the "Lightning" Plate, it does its work at a single cut. The die is adjustable for wear, and to make bolts and nuts fit tightly or loosely as may be desired. The stock used is similar to the "Lightning" and the taps the same.



Set No. 1. $\frac{3}{16}$ to $\frac{7}{16}$ inch. Stock 10 inches long. With both Stock and Brace Holder for Dies. 5 sizes, $\frac{3}{16}$, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$ inch Taps, Dies and Guides.

Complete in Case \$10 50



Set No. 2. $\frac{1}{4}$ to $\frac{3}{4}$ inch. Stock 23 inches long. 7 sizes $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ inch Taps, Dies and Guides.

Complete in Case \$17 50



Set No. 4. $\frac{3}{8}$ to 1 inch. Stock 29 inches long. 7 sizes, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1 inch Taps, Dies and Guides.

Complete in Case \$24 00



Set No. 5. $\frac{1}{4}$ to 1 inch. Stock 29 inches long. 9 sizes, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1 inch Taps, Dies and Guides.

Complete in Case \$27 00



Set No. 6. $\frac{1}{2}$ to 1 $\frac{1}{4}$ inch. Stock 35 inches long. 7 sizes, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, 1 $\frac{1}{8}$, 1 $\frac{1}{4}$ inch Taps, Dies and Guides.

Complete in Case \$30 00



Set No. 8. $\frac{1}{4}$ to 1 $\frac{1}{4}$ inch. Stock 35 inches long. 11 sizes, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, 1 $\frac{1}{8}$, 1 $\frac{1}{4}$ inch Taps, Dies and Guides.

Complete in Case \$38 50

Taps and Dies for the "Green River" Screw Plate.

HAND TAPS OF THE VERY FINEST QUALITY.

SAME AS USED IN THE "LIGHTNING" PLATE.

TAPER.



PLUG.



BOTTOMING.



DIES.

The principle of the Dies will be understood from the cuts and explanation below.



The cut shows a Die and Guide taken out of the Stock, also the same taken apart to show the mechanism. The cup-headed screw on the right holds the halves firmly together, while the size is regulated by the wedge-shaped screw on the left, the whole being clamped in the elastic stock, same as in the "Lightning" Plates.

PRICES OF TAPS AND DIES SEPARATELY.

Inches,	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	11/16	3/4	13/16	7/8	15/16	1	1 1/8	1 1/4
Taps, Each,	\$0 45	0 45	0 50	0 55	0 60	0 70	0 80	0 90	1 05	1 20	1 40	1 60	1 80	2 00	2 25	2 60
Dies, "	\$1 25	1 25	1 25	1 50	1 50	1 75	1 75	1 75	1 75	2 00	2 00	3 00	3 00	3 00	3 75	4 50

Stocks Nos. 1, 2, 4 and 5, \$2 00 each. Nos. 6 and 8, \$4 00 each. **Guides**, \$0 25 each.

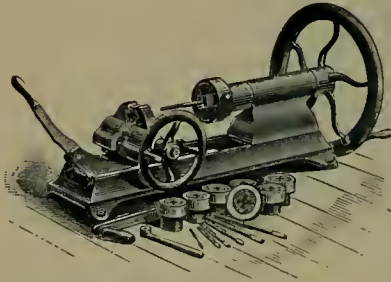
Adjustable Pipe Dies, 1 inch and under, supplied for above Stocks, Nos. 2 to 8.

NOTE. — All sets furnished for rough iron, 1/32 inch over exact standard, unless otherwise ordered.

WILEY & RUSSELL MFG CO.'S

"Lightning" Bolt Cutters and Taps.

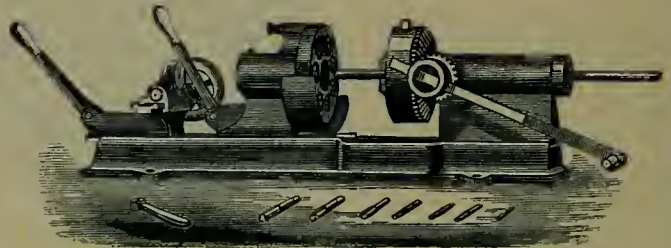
HAND BOLT CUTTERS AND NUT-TAPPERS.



No. 0. Made to be bolted to the bench or table. Fitted with 7 sizes, from $\frac{1}{4}$ inch to $\frac{3}{4}$ inch. Usual assortment, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$ and $\frac{3}{4}$ inch.

Price with Taps, Dies in Collets, etc.,

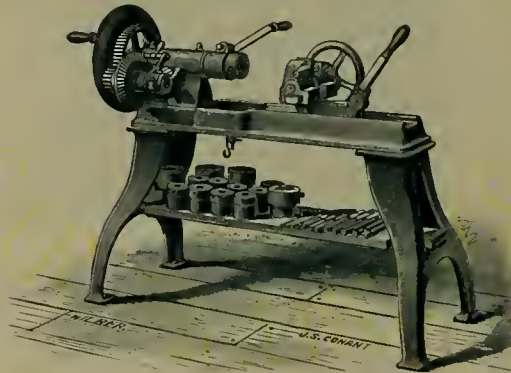
Complete, without Balance-Wheel . . . \$65 00



No. 1 1/2. For the bench or table. Fitted with 7 sizes from $\frac{3}{8}$ inch to 1 inch, inclusive. Usual assortment, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$ and 1 inch, all $\frac{1}{32}$ inch over exact standard, unless otherwise ordered.

Price, complete with Taps, Dies, Nut Chuck, etc . . . \$100 00

HAND BOLT-CUTTER AND NUT-TAPPER.



No. 10. Weight, 350 pounds.

The capacity of this Machine is, for Bolts and Nuts, $\frac{1}{4}$ inch to $1\frac{1}{2}$ inch, and for pipes, $\frac{1}{8}$ inch to 2 inch. Any crooked or odd-shaped pieces may be threaded without straightening. The engraving shows a $\frac{1}{2}$ inch staple, held in the chuck. The spindle is hollow, and bolts of any length may be cut. Bolts and nuts, say $\frac{3}{4}$ inch and under are rapidly done, with the gears out, by the handle on the balance-wheel, in which wheel, moreover, the crank may be placed when desired. For large work the gearing multiplies the direct force of the crank at the side of the Machine between six and seven fold, and the arrangement is such that, the Die being run sufficiently far on the work, the gears may instantly be thrown out and the Die whirled swiftly back off the thread by means of the balance-wheel.

Extra steel dogs are attached to the Chuck to secure large smooth pipe which might sometimes slip in the jaws.

The oil poured on the work is drained into a basin under the Chuck and can be used again.

The remarkably great range of this Machine — it being equally excellent on very large, very small, crooked or straight bolts (with nuts), and on pipe — must make it a favorite.

Assortment 1. Machine, complete, with Taps, and Dies in Collets for Bolt and Nuts, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$ and $1\frac{1}{2}$ inch Chuck, Wrenches, etc., for bench.

Price . . . \$185 00

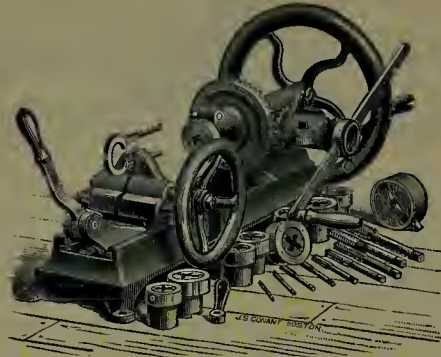
If wanted for Power, add \$50 00. Add for Pipe Dies and Collets $1\frac{1}{4}$ to 2 inch, \$40 00.

FOR PRICES MACHINE TAPS AND DIES SEE OPPOSITE PAGE.

WILEY & RUSSELL M'FG CO.'S

"Lightning" Bolt Cutters and Taps.

BOLT-CUTTER AND NUT-TAPPER.

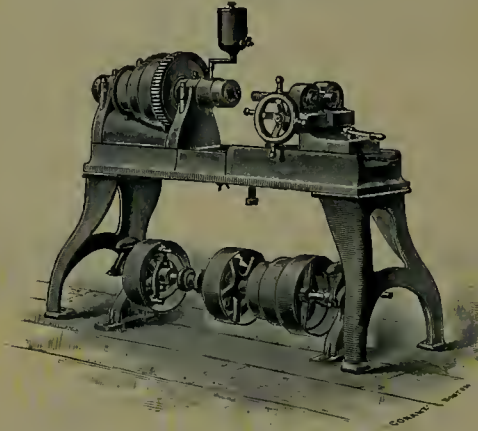


No. 20. For the bench or table. Fitted with 9 sizes, 1/4 inch to 1 inch. Usual assortment, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8 and 1 inch.

Price, with Taps, Dies in Collets, etc., complete for the bench

\$90 00

BOLT-CUTTER AND NUT-TAPPER.—For Power Only.



No. 15. Hollow Spindle. Vise adapted to hold properly the various sizes, and to take work of irregular shapes. Powerfully back-gearred, the gears to be thrown out, as in engine lathe, for small work, and also in running back after cutting screws.

Assortment 1. Machine complete, with Taps, Dies and Collets for bolts and nuts, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8, 1, 1 1/8, 1 1/4, 1 3/8 and 1 1/2 inch, Counter-shaft, etc.

Price

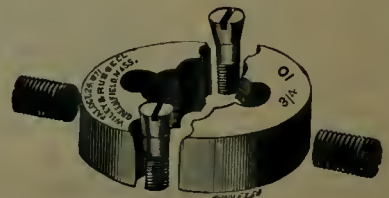
\$375 00

1 3/4 inch Tap, Die and Collet extra, \$17 50.

2 inch Tap, Die and Collet extra, \$21 00.

Pipe Dies and Collets for the above, 1/4 to 2 inch, add \$40 00.

MACHINE TAPS AND DIES.



PRICE MACHINE TAPS AND DIES.

Inches,	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	2
Taps, Each,	\$0 60	0 70	0 80	0 90	1 00	1 15	1 30	1 60	2 10	2 80	3 20	3 70	4 20	4 70	5 30	6 00	7 70
Dies, "	1 00	1 00	1 15	1 30	1 50	1 75	1 90	2 35	3 00	3 75	4 40	5 00	5 75	7 00	8 50	10 00	12 00

"Green River" Tire Benders.

FOR LIGHT AND MEDIUM WORK.



This machine will bend accurately and easily tires from the lightest to $\frac{3}{8}$ inch thick by 3 wide. The circle to be made is fixed by means of a right and left hand screw, operated by the hand wheel acting equally upon the two lower rollers. The rollers are 3 inches wide. The upper roller is faced with steel and milled to insure the regular feeding through of the work. It is powerfully geared, and two cranks may be used if desired.

Weight, 140 Pounds

Price, \$30 00

"Green River" Tire-Shrinker.



The Tire lies in a properly-shaped former, and force being applied to the handle with the left hand, the right hand remains at liberty to use the hammer in keeping the work true and straight, the only safe way of getting a perfect result at a single heat.

The cams which grip the work are set by means of levers at the will of the workman, and are instantly withdrawn from the finished tire in the same way. All slipping at starting, and all jamming and sticking after finishing, are thus avoided.

It is managed by one man with perfect ease, and works equally well on the lightest steel tires and on wagon tires $2\frac{1}{2}$ by $\frac{5}{8}$ inches wide.

It occupies a space about 2 feet square on the floor.

Weight, 160 Pounds

Price, \$20 00